ISSN 2456-3110
Vol 4 · Issue 5
Sept-Oct 2019

Journal of Ayurveda and Integrated Medical Sciences

www.jaims.in

JAIMS

An International Journal for Researches in Ayurveda and Allied Sciences

Charaka Publications

Indexed

Journal of
Ayurveda and Integrated Medical Sciences
ISSN 2456-3110
CASE REPORT Sept-Oct 2019

Ayurvedic mangement of Stroke - A Case Report

Dr. Jithesh M[1], Dr. Muhammed Faisal[2]

[1]Professor & HOD, Department of Kayachikitsa, [2]Post Graduate Scholar, Manovigyan Avum Manasroga, VPSV Ayurveda College, Kottakkal, Kerala, INDIA.

ABSTRACT

Stroke is one of the leading causes of adult neurological disability across the globe. Its prevalence ranges from 40 to 270 per 100,000 population. The timely management of stroke is so crucial so as to limit the upcoming disability. Stroke is the condition of sudden onset of weakness, numbness, paralysis, slurred speech, aphasia, problems with vision and other manifestations of a sudden interruption of blood flow to a specific anatomical area of the brain. Ayurvedic management is having results in this regard as per reported studies. The present article deals with a diagnosed case of subacute non-haemorrhagic infarct involving the right fronto parieto temporal region and the ganglio capsular region, presented as left sided hemiplegia. Stroke is quite clearly defined along with its symptoms, prognosis and management in Ayurveda in the context of *Pakshaghata* as a *Vatavyadhi*, affecting *Madhyama Rogamarga*, in which *Sira* and *Snayu* are mainly affected. *Rookshana* followed by *Sneha-Sweda, Sodhana, Vasthi* and *Nasya* along with selected *Samana* drugs were administered to the patient. Assessments were done before and after treatment using Motor Assessment Scale for Stroke. Supine to sitting over side of bed, balanced sitting, sitting to standing and walking are the main domains which got maximum improvement as per the assessment. The recovery was promising and worth detailing.

Key words: *Stroke, Pakshaghata, Motor Assessment Scale for Stroke, Vatavyadhi.*

INTRODUCTION

Stroke is one of the major causes of adult disability. Sixty percent of stroke survivors have disabilities in upper limb and/or lower limb. One third of them need an assisted living environment or help for their activities of daily living.[1] The prevalence of stroke in India ranges from 40 to 270 per 1,00,000 population.[2] As per WHO data published in 2014, stroke mortality in India reached 9.94 % among the total deaths.[3]

Address for correspondence:
Dr. Jithesh M.
Professor & HOD, Department of Kayachikitsa,
VPSV Ayurveda College, Kottakkal, Kerala, INDIA.
E-mail: drjitheshm@gmail.com

Submission Date: 12/09/2019 Accepted Date: 22/10/2019

Access this article online

Quick Response Code

Website: www.jaims.in

Published by Maharshi Charaka Ayurveda Organization, Vijayapur, Karnataka (Regd) under the license CC-by-NC-SA

Stroke is a condition resulting in the sudden onset of weakness, numbness, paralysis, slurred speech and other manifestations as a result of sudden interruption of blood flow or from a heamorrhage in a specific area of the brain resulting in neurological deficit. The ischemic area involved determines the type of focal deficit that is observed in the affected. The primary pathophysiology of stroke may be an underlying heart or blood vessel disease including hypertension, atherosclerosis leading to coronary artery disease, dyslipidaemia etc. The two major types of stroke are ischemic and haemorrhagic strokes.

Stroke can be clearly correlated with the condition of *Pakshaghata* in Ayurveda, which is a *Kevalavata Vyadhi* and results because of *Vatakopa*. It affects *Siras* (vascular structures) and *Snayus* (tendons and ligaments) of one half of the body and face.

Pakshagata[4] have been explained in Ayurveda classics, which is a *Vatavyadhi* resulting in the weakness or dysfunction of half of the body, resulting from the aggravation of *Vata*, the cause being *Dhatukshaya* or *Avarana* i.e. any type of

ISSN: 2456-3110 CASE REPORT Sept-Oct 2019

obstruction.[5] It is a condition affecting *Madhyama Roga Marga*[6] and *Yapya*[7] type of disease affecting the *Siras* (vascular structures) and *Snayus* (tendon and ligaments) of half of the body as well as the face. Cardinal features are *Sandhi Bandha Vimokshana* (subluxation of joints or hypotonia), *Akarmana* (motor disability) and *Vichethana* (sensory disability).

In the aspect of management, three basic points are to be assessed, whether there is *Aama*, whether the condition is caused by *Avarana* and if there is any associated *Dosha* along with the main *Dosha* i.e. *Vata*. The *Ama* has to be addressed with *Pachana* or *Rookshana* initially, if present. The associative *Dosha* have also to be considered while fixing the protocol. If the *Pitta* is associating with *Vata*, we have to proceed with *Brimhna* protocol, while if *Kapha* is associated, *Langana* is the method adopted.

The *Avarana* have to be removed if present, so as to make the *Vata* function in a usual manner. In a condition where *Kapha* is causing *Avarana* to *Vata*, *Kapha Shamana* treatments are given initial priority followed by *Vata Shamana* treatment. Treatment principle explained for *Pakshagata* in classics are *Snehana* (internal and external oleation), Sweda, *Sodhana* preferably *Virechana* (purgation), *Vasthi, Nasya, Moordhni Taila* followed by *Rasayana*.[8] The psychological isssues have to be addressed with selected *Satvavajaya* protocol as per the condition, in the initial stages of the management, as per *Susrutha*.

Presenting complaints with history

A 61-year-old Muslim gentleman hailing from Andaman attended the Kayachikitsa OPD of our College Hospital, presenting with weakness of the left side of the body from the last 4 months. He was brought in a wheel chair on initial consultation.

The onset was acute, as 4 months ago he felt weakness of the left side of the body while awakening from bed in the morning. The patient was unconscious at that time and immediately taken to the nearest hospital. There was no vomiting or giddiness, but the face has deviated to the left side. He was admitted in ICU and remained unconscious for one day. The left side was paralysed and he was unable to walk and even cannot move the left upper and lower limbs. There was impairment in speech, altered memory along with the motor impairment. He was admitted to the hospital for one month and was on allopathic medications as well as physiotherapy. On discharge, memory impairment got relief, but motor functions and slurred speech persisted. There was no further improvement on him continuing the same for three months.

The patient was a known case of hypertension and dyslipidaemia for last 5 years and on irregular medication. He was a chronic smoker, non-alcoholic and had been consuming nonveg food items with an irregular food habit. He had poor appetite, reduced sleep, constipated irregular bowel which needed medication.

Clinical Examination

On examination of Vitals - pulse rate was 74/min, regular and of full volume, Heart rate was 74/min with normal S1 and S2, Blood Pressure was 130/100 mm Hg (right arm sitting), Respiration rate was recorded as 18/min and body weight was 75 Kg.

On neurological examination, he was conscious, oriented and responded well. All higher mental functions were intact except slurring of speech. On cranial nerve examinations, squint was present. Test for trigeminal nerve such as clenching of teeth, the opening of the mouth, opening of the jaw against resistance, side to side movement were impaired. On facial nerve examination, the angle of the mouth had deviated, and nasolabial fold not marked well. On Vagus nerve examination left side of the soft palate arch was lowered. On spinal accessory nerve examination left side sternomastoid muscle had a weakness, on shrugging of shoulder left side (trapezius muscle) had a weakness. On examining the hypoglossal nerve, tongue is lateralized toward the left side on protrusion and reduced strength on the left side. All other cranial nerve functions were intact.

On motor system examination, motor weakness with grade III in left upper and lower limbs was found and was hypotonic while the right side was normal. Deep tendon reflexes were exaggerated with grade III in the

ISSN: 2456-3110 CASE REPORT Sept-Oct 2019

left upper and lower limbs. Finger nose test, knee heel test and Romberg's couldn't be elicited. No loss of sensation, touch, temperature, and pressure were noticed.

Diagnosis, assessment and treatment

CT of Brain revealed that subacute non-haemorrhagic infarct involving the right fronto-parieto-temporal regions and the ganglia capsular region causing effacement of the ipsilateral ventricle with a midline shift of 4.8 mm to the left. Angiogram neck and intracranial vessels show that focal area of narrowing noted in the supraglenoid segment of the right internal carotid artery just before the bifurcation of Middle Cerebral Artery.

Table 1: Assessment of motor function with Motor Assessment Scale for Stroke

Motor functions	BT	AT
Supine to side lying	1	3
Supine to sitting over side of bed	0	4
Balanced sitting	1	4
Sitting to standing	0	2
Walking	0	3
Upper arm function	0	0
Hand movement	0	0
Advanced hand activities	0	0

Table 2: Adopted procedures and medicines.

Procedures	Medicines	Duration	Rationale
Dhanyamla Dhara	*Dhanyamla*	3 days	*Pachana* and *Rookshana*
Udwarthana	*Kola Kulathadi Churna*[9]	5 days	*Rookshana*
Vasthi	*Vaitarana Vasthi*[10]	2 day	*Pachana, Vata Anulomana*
Churna Pinda Sweda	*Kolakulathadi Churna*	7 days	*Swedana*
Virechana	*Gandarva Eranda Tailam*[11]	1 day	*Sodhana*
Patra Potala Sweda	*Vathahara Patra*	7 days	*Snehana* and *Swedana*
Shastika Pinda Sweda	*Shashtika, Bala, Ksheera*	7 days	*Brimhana, Vathahara*
Nasyam	*Karapasasthiadi Tailam*[12]	7 days	*Sira Sodhana, Vathahara*

DISCUSSION

Pakshaghata is explained in detail with its *Dosha* subtypes by almost all the Ayurvedic scholars with its prognosis as well as detailed management. It is a *Vatavyadhi* of *Nanatmaja* variety according to *Charaka* and *Mahavatavyadhi* as per *Susruta*. *Vata Dosha* gets vitiated due to the indulgence of various diet and regimen and alters the function of peculiar srotases in the body, resulting in the dysfunction of one half of the body. There may be speech defect and altered sensory as well as motor functions as well. Other clinical conditions such as hypertension or dyslipidemia may also contribute to such manifestation.

Initially the *Ama* stage has to be get rid of followed by the management mentioned for *Vata Vyadhi*. The management varies as per the associative *Dosha* involved. *Sneha* and *Sweda* followed by *Virechana* is advised as the specific management. *Acharya Susrutha* explains the importance of *Moordhni Taila* such as *Sirovasthi, Siropichu* etc. in the management. *Nasya Karma* is having significant role in the management of conditions affecting *Vata Kopa* in *Siras* such as *Pakshagatha.*

Initially, the condition was considered as *Vatika* in nature with association of *Kapha*. In such condition, *Vata Kaphahara* drugs are ideal to be used.

ISSN: 2456-3110 CASE REPORT Sept-Oct 2019

Ashtavarga Kwatha,[13] *Vyoshadi Guggulu*,[14] *Varanadi Kwatha* tablets[15] were administered. For correcting the derangement of *Apana*, *Hingutriguna Lehya* was administered at bed time.[16] Other medicines in use were *Pippalyasava*,[17] *Abhyarishta*[18] and *Ekangaveera Rasa*. For improving speech, *Kalyanavaleha Churna* was applied mixed with honey on the tongue.

In the next stage of treatment, the patient was prepared for *Sodhana* therapy. The *Lakshanas* of *Saama Vata*[19] such as *Vibandha, Agnisaada* and *Aantrakujana* were present and based on these observation, *Rookshana* procedure *Dhanyamladhara* was done for 3 days followed by *Udwartanam* with *Kola Kuluthadi Choornam* for 5 days. After the initial *Rookshana* and *Pachana*, the patient felt lightness of the body, fatigue came down and appetite was increased.

As the patient complained of abdominal distension, diffuse pain and heaviness of the thighs, *Vasthi* was planned with consideration of localized *Vata Kopa* in the *Pakwasaya* and *Vaitaranavasthi* was done for 2 days adding *Brihat Saindavadi Taila.* After the *Aama* got subsided, *Choorna Pinda Sweda* for 7 days were administered after applying *Karpasasthyadi Taila*. Consequently, *Virechana* was performed with 40 ml of *Gandarva Eranda* at 8 am, on the next day.

Three day's rest was given, and the patient was maintained on *Pathyahara* (a strict diet of rice gruel, green gram soup, cooked vegetables, especially fibre-rich ones, with minimal oil, spice, and salt). This was followed by *Patrapotala Sweda* for 7 days as *Samana Chikitsa*. For *Sodhana* of *Siras* and aiming for the facial paralysis, *Nasya* was done with *Karpasasthyadi Taila* of dose 2 ml, each nostril for 7 days. *Shastika Panda Sweda* for 7 days was done subsequently for *Brimhana* and hence *Vathahara* action.

After one-month treatment, there was relief from major symptoms. Initially, the patient was on a wheel chair, unable to sit or stand even with support. But after treatment, there was overall improvement in functions. The patient was able to sit from lying position, stand without support and able to walk with minimal support.

On assessing motor assessment scale for stroke, the major motor functions such as supine to sitting over side of the bed, balanced sitting, sitting to standing and walking are the main domains which maximum improvement was attained. But upper arm functions, hand movements, advanced hand movements like fine motor functions couldn't get considerable improvement.

CONCLUSION

The positive response in the present case was promising and worth detailing. The timely approach, with Ayurvedic concepts are effective in the management of *Pakshagatha* at the clinical level as observed from several cases. The associative conditions such as diabetes, hypertension, dyslipidemia have to be addressed effectively, on time. The protocol including *Rookshana, Snehana, Sweda, Virechana, Vasthi, Nasya* followed by *Rasayana* is beneficial for the affected. Techniques such as psychotherapy, yoga, physiotherapy etc. are capable of enhancing the results. Further studies are the need of the hour so as to promote the results and also the capability of health science such as Ayurveda in managing such clinical conditions.

REFERENCES

1. Thomas Carmichael S. Cellular and molecular mechanisms of neural repair after stroke: making waves. Annals of Neurology 2006; 59: 735. http://dx.doi.org/10.1002/ana.20845.
2. Pandian JD, Jaison A, Deepak SS, Kalra G, Shamsher S, Lincoln DJ et.al. Public Awareness of Warning Symptoms, Risk Factors, and Treatment of Stroke in Northwest India. Stroke 2005; 36: 644-648. http://dx.doi.org/10.1161/01. STR.0000154876.08468.
3. World health ranking - top 20 causes of death in India. Httpp://www.worldlifeexpectancy.com/india-stroke. Published by WHO May 2014. Accessed on 6th May 2019.

ISSN: 2456-3110 **CASE REPORT** Sept-Oct 2019

4. Vagbhata's Astanga hrdaya, Nidanastana, Murthy Srikantha KR, (trans.) (eng.), Varanasi: Chowkhamba Krishnadas academy ; vol2; 2013; p155; 15/38 – 41.
5. Vagbhata's Astanga hrdaya, Nidanastana, Murthy Srikantha KR, (trans.) (eng.), Varanasi: Chowkhamba Krishnadas academy; vol 2; 2013; p155;15/5-6
6. Vagbhata's Astanga Hrdaya, Sutrastana, Murthy Srikantha KR, (trans.) (eng.), Varanasi: Chowkhamba Krishnadas academy; vol1; 1999; p175;12/47-48
7. Vagbhata's Astanga Hrdaya, Sutrastana, Murthy Srikantha KR, (trans.) (eng.), Varanasi: Chowkhamba Krishnadas academy; vol1; 1999; p15; 1/30-33.
8. Vagbhata's Astanga hrdaya, Chikitsastana, Murthy Srikantha KR, (trans.) (eng.),Varanasi: Chowkhamba Krishnadas academy; vol 2; 2010; p505; 21/44.
9. Charaka Samhita, Sutrastana, Sharma PV,(trans.) (eng.), Varanasi: Chaukhambha Orientalia; vol.1; Ed.6; 2000; p21;2/18.
10. Rajagopal K, Panchakarma chiktsasamgraham, Kottakkal: Dept. of publication AVS, 2009, p157
11. Pandey Gyanendra, Vinodlalsen's Bhaisajya Ratnavali, (comm.) (eng.), Varanasi: Chawkhambha Krishnadas academy, vol3, 2008, p 465,25/11.
12. Krishnan KV, Pillai GSA, Sahasrayogam, Sujanapriya, (comm.) (Malayalam); 32th ed. Alappuzha; Vidyarambham Publishers Mullakkal; 2013; p278.
13. Krishnan KV, Pillai GSA, Sahasrayogam, Sujanapriya, (comm.) (Malayalam); 32th ed. Alappuzha; Vidyarambham Publishers Mullakkal; 2013; p78.
14. Vagbhata's Astanga hrdaya, Chikitsastana, Murthy Srikantha KR, (trans.) (eng.), Varanasi: Chowkhamba Krishnadas academy; vol 2; 2010; p506; 21/50.
15. Vagbhata's Astanga hrdaya, Sutrastana, Murthy Srikantha KR, (trans.) (eng.), Varanasi: Chowkhamba Krishnadas academy; vol1; 1999; p203; 16/21-22.
16. Sarangadharcharya's sarangadhara Samhita, Murthy himasagara, (comm.) (eng.),Varanasi: Chawkhambha Sanskrit series office, Ed.2nd, 2007, madhyamakhanda, 6/9-11
17. Krishnan KV, Pillai GSA, Sahasrayoga, Sujanapriya, (comm.) (Malayalam); 32th ed. Alappuzha; Vidyarambham Publishers Mullakkal; 2013; p262.
18. Vagbhata's Astanga hrdaya, Chikitsastana, Murthy Srikantha KR, (trans.) (eng.), Varanasi: Chowkhamba Krishnadas academy; vol1; 2010; p317; 8/64-68.
19. Vagbhata's Astanga hrdaya, Sutrastana, Murthy Srikantha KR, (trans.) (eng.), Varanasi: Chowkhamba Krishnadas academy; vol1; 9th ed; 2013; p203; 13/26-29.

How to cite this article: Dr. Jithesh M, Dr. Muhammed Faisal. Ayurvedic mangement of Stroke - A Case Report. J Ayurveda Integr Med Sci 2019;5:348-352.

Source of Support: Nil, **Conflict of Interest:** None declared.

****